Magnetic Resonance in Solids, 2014, vol.16, N1

Scaling corrections to the static magnetic susceptibility of the heavy fermions compounds YbRh2Si2and YbIr2Si2

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Abstract

We theoretically investigated the static magnetic susceptibility in the heavy fermion compounds YbRh2Si2and YbIr2Si2. The molecular field approximation together with the renormalization of the Kondo interaction by the high energy conduction electrons excitations result in the Curie-Weiss law and Van Vleck susceptibility with temperature dependent Curie and Weiss parameters.

Keywords

Kondo effect, Kondo lattice, Static magnetic susceptibility